Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
```

LOGINID: SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
* * * * * * * * * * Welcome to STN International
NEWS 1
                   Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 JAN 08 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3 JAN 16 CA/Caplus Company Name Thesaurus enhanced and reloaded
NEWS 4 JAN 16 IPC version 2007.01 thesaurus available on STN
NEWS 5 JAN 16 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6 JAN 22 CA/CAplus updated with revised CAS roles
NEWS 7 JAN 22 CA/CAplus enhanced with patent applications from India
NEWS 8 JAN 29 PHAR reloaded with new search and display fields
NEWS 9 JAN 29 CAS Registry Number crossover limit increased to 300,000 in
                  multiple databases
NEWS 10 FEB 15 PATDPASPC enhanced with Drug Approval numbers
NEWS 11 FEB 15 RUSSIAPAT enhanced with pre-1994 records
NEWS 12 FEB 23 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13 FEB 26 MEDLINE reloaded with enhancements
NEWS 14 FEB 26 EMBASE enhanced with Clinical Trial Number field
NEWS 15 FEB 26 TOXCENTER enhanced with reloaded MEDLINE
NEWS 16 FEB 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000
                  to 300,000 in multiple databases
NEWS 18 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19 MAR 16 CASREACT coverage extended
NEWS 20 MAR 20 MARPAT now updated daily
NEWS 21 MAR 22 LWPI reloaded
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 23 APR 02 JICST-EPLUS removed from database clusters and STN
NEWS 24 APR 30 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25 APR 30 CHEMCATS enhanced with 1.2 million new records
NEWS 26 APR 30 CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27 APR 30 INPADOC replaced by INPADOCDB on STN
NEWS 28 MAY 01 New CAS web site launched
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS
               STN Operating Hours Plus Help Desk Availability
               Welcome Banner and News Items
NEWS LOGIN
               For general information regarding STN implementation of IPC 8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 12:38:46 ON 01 MAY 2007

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE Do you want to switch to the Registry File? Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:38:58 ON 01 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 APR 2007 HIGHEST RN 933825-30-0 DICTIONARY FILE UPDATES: 30 APR 2007 HIGHEST RN 933825-30-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10578677.str

```
chain nodes :
33 34 35 36 37 38 39 40
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25 26 27 28 29 30 31 32
chain bonds :
1-33 \quad 5-36 \quad 8-35 \quad 12-34 \quad 16-34 \quad 21-33 \quad 24-40 \quad 28-39 \quad 33-37 \quad 34-38
ring bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-7 \quad 5-6 \quad 5-10 \quad 6-7 \quad 7-8 \quad 8-11 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13
13-14 \quad 15-16 \quad 15-30 \quad 16-17 \quad 17-18 \quad 18-31 \quad 19-27 \quad 19-22 \quad 20-26 \quad 20-21 \quad 21-22 \quad 23-24
 23-27 24-25 25-26 26-27 28-29 28-32 29-30 30-31 31-32
exact/norm bonds :
1-33 \quad 5-36 \quad 8-35 \quad 12-34 \quad 16-34 \quad 21-33 \quad 23-24 \quad 23-27 \quad 24-25 \quad 24-40 \quad 25-26 \quad 28-29
28-32 28-39 29-30 31-32
exact bonds :
5-6 5-10 7-8 8-11 33-37 34-38
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-7 \quad 6-7 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13 \quad 13-14 \quad 15-16 \quad 15-30
16-17 \quad 17-18 \quad 18-31 \quad 19-27 \quad 19-22 \quad 20-26 \quad 20-21 \quad 21-22 \quad 26-27 \quad 30-31
isolated ring systems :
containing 1 : 15 : 19 :
```

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STF

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 12:39:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 2 TO 124
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 12:39:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 29 TO ITERATE

100.0% PROCESSED 29 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 172.10 172.31

FILE 'HCAPLUS' ENTERED AT 12:39:30 ON 01 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 May 2007 VOL 146 ISS 19

FILE LAST UPDATED: 30 Apr 2007 (20070430/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 2 L3

=> d 14 ibib abs hitstr tot

L4 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:788224 HCAPLUS

DOCUMENT NUMBER: 145:212717

TITLE: Benzimidazolone compounds with plural color hue

INVENTOR(S): Hosaka, Masayoshi; Nagata, Yoshiaki PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006206761 PRIORITY APPLN. INFO.: GI	А	20060810	JP 2005-21322 JP 2005-21322	20050128 20050128

AB The invention relates to benzimidazolone compds. of I with Cu-K α characteristic X-ray diffraction peaks with Bragg angle 20 14.9 \pm 0.2, 18.9 \pm 0.2, 20.6 \pm 0.2, and 24.6 \pm 0.2°. Thus, a nonaq. dispersion coating comprising a reddish purple pigment of β -typed crystal I, an alkyd resin (Beckosol J 524-IM 60), and melamine resin (Super Beckamine G 821-60) showed high gloss.

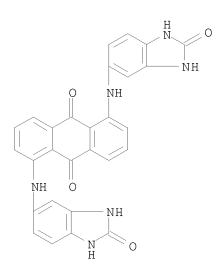
Ι

IT 854738-84-4P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (benzimidazolone reddish purple pigments with plural color hue for glossy coatings)

RN 854738-84-4 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:547668 HCAPLUS

DOCUMENT NUMBER: 143:61474

TITLE: Benzimidazolone compound violet pigment

INVENTOR(S):
Hosaka, Masaki

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2005056688 W: AE, AG, AL CN, CO, CR GE, GH, GM LR, LS, LT NZ, OM, PG TM, TN, TR RW: BW, GH, GM AZ, BY, KG	A1 20050623 , AM, AT, AU, AZ, , CU, CZ, DE, DK, , HR, HU, ID, IL, , LU, LV, MA, MD, , PH, PL, PT, RO, , TT, TZ, UA, UG, , KE, LS, MW, MZ, , KZ, MD, RU, TJ,	WO 2004-JP18190 BA, BB, BG, BR, BW, BY, DM, DZ, EC, EE, EG, ES, IN, IS, KE, KG, KP, KR, MG, MK, MN, MW, MX, MZ, RU, SC, SD, SE, SG, SK, US, UZ, VC, VN, YU, ZA, NA, SD, SL, SZ, TZ, UG, TM, AT, BE, BG, CH, CY,	20041207 BZ, CA, CH, FI, GB, GD, KZ, LC, LK, NA, NI, NO, SL, SY, TJ, ZM, ZW ZM, ZW, AM, CZ, DE, DK,
	, SK, TR, BF, BJ,	IE, IS, IT, LT, LU, MC, CF, CG, CI, CM, GA, GN,	

GI

JP 2005194265	A	20050721	JP 2004-352605		20041206
JP 3680862	В2	20050810			
EP 1693421	A1	20060823	EP 2004-820196		20041207
R: CH, DE, FR,	GB, LI				
CN 1878838	A	20061213	CN 2004-80033010		20041207
PRIORITY APPLN. INFO.:			JP 2003-410204	Α	20031209
			WO 2004-JP18190	W	20041207
OTHER SOURCE(S):	MARPAT	143:61474			

AB Compound I (R1-R4 = H, C1-5 alkyl or C1-5 alkoxy) with good thermal stability is prepared and used as a violet pigment for coatings. Thus, an alkyd resin coating containing I (R1-R4 = H; decomposition temperature 504°) showed good storage stability, solvent resistance, and color hue.

Ι

- IT 854738-84-4P
 - RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 - (benzimidazolone compound violet pigment with good thermal stability and color hue for coatings)
- RN 854738-84-4 HCAPLUS
- CN 9,10-Anthracenedione, 1,5-bis[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL REGISTRY		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	20.94	193.25
DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
DISCOUNT AMOUNTS (FOR QUALIFITING ACCOUNTS)	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.56	-1.56

FILE 'REGISTRY' ENTERED AT 12:42:00 ON 01 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 APR 2007 HIGHEST RN 933825-30-0 DICTIONARY FILE UPDATES: 30 APR 2007 HIGHEST RN 933825-30-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10578677a.str

chain nodes : 24 25 26 27 28 29 30 ring nodes : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 chain bonds : $1 - 24 \quad 5 - 27 \quad 8 - 26 \quad 12 - 25 \quad 17 - 24 \quad 20 - 30 \quad 24 - 28 \quad 25 - 29$ ring bonds : $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-7 \quad 5-6 \quad 5-10 \quad 6-7 \quad 7-8 \quad 8-11 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13$ 13-14 15-23 15-18 16-22 16-17 17-18 19-20 19-23 20-21 21-22 22-23 exact/norm bonds : $1-24 \quad 5-27 \quad 8-26 \quad 12-25 \quad 17-24 \quad 19-20 \quad 19-23 \quad 20-21 \quad 20-30 \quad 21-22$ exact bonds : 5-6 5-10 7-8 8-11 24-28 25-29 normalized bonds : $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-7 \quad 6-7 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13 \quad 13-14 \quad 15-23 \quad 15-18$ 16-22 16-17 17-18 22-23 isolated ring systems : containing 1 : 15 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS

L5 STRUCTURE UPLOADED

=> d 15 L5 HAS NO ANSWERS L5 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 12:42:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s 15 sss full

FULL SEARCH INITIATED 12:42:35 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 19 TO ITERATE

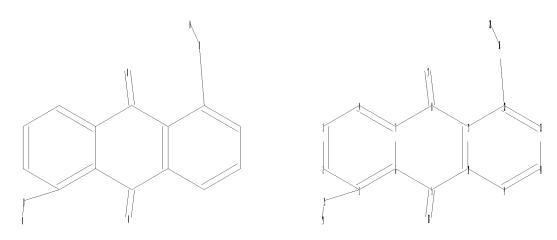
100.0% PROCESSED 19 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L7 1 SEA SSS FUL L5

=>

Uploading C:\Program Files\Stnexp\Queries\10578677b.str



chain nodes :

15 16 17 18 19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

1-15 5-18 8-17 12-16 15-19 16-20

ring bonds :

 $1 - 2 \quad 1 - 6 \quad 2 - 3 \quad 3 - 4 \quad 4 - 7 \quad 5 - 6 \quad 5 - 10 \quad 6 - 7 \quad 7 - 8 \quad 8 - 11 \quad 9 - 10 \quad 9 - 14 \quad 10 - 11 \quad 11 - 12 \quad 12 - 13$ 13-14

exact/norm bonds :

1-15 5-6 5-10 5-18 7-8 8-11 8-17 12-16

exact bonds : 15-19 16-20

normalized bonds : $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-7 \quad 6-7 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13 \quad 13-14$

Match level :

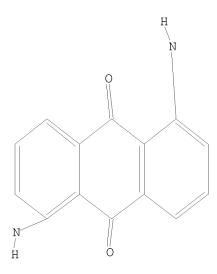
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS

L8 STRUCTURE UPLOADED

=> d 18

L8 HAS NO ANSWERS

L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 18

SAMPLE SEARCH INITIATED 12:43:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2760 TO ITERATE

72.5% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 52049 TO 58351

PROJECTED ANSWERS: 5254 TO 7386

L9 50 SEA SSS SAM L8

=> s 18 sss full

FULL SEARCH INITIATED 12:43:38 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 55085 TO ITERATE

100.0% PROCESSED 55085 ITERATIONS 6142 ANSWERS

SEARCH TIME: 00.00.01

L10 6142 SEA SSS FUL L8

=> FIL HCAPLUS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL

CA SUBSCRIBER PRICE

DISCOUNT AMOUNTS (FOR QUARTITING ACCOUNTS)

ENTRY SESSION

-1.56

50 ANSWERS

FILE 'HCAPLUS' ENTERED AT 12:43:43 ON 01 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 May 2007 VOL 146 ISS 19 FILE LAST UPDATED: 30 Apr 2007 (20070430/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 12:38:46 ON 01 MAY 2007)

FILE 'REGISTRY' ENTERED AT 12:38:58 ON 01 MAY 2007

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 1 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 12:39:30 ON 01 MAY 2007

L4 2 S L3

FILE 'REGISTRY' ENTERED AT 12:42:00 ON 01 MAY 2007

L5 STRUCTURE UPLOADED

L6 0 S L5

L7 1 S L5 SSS FULL

L8 STRUCTURE UPLOADED

L9 50 S L8

L10 6142 S L8 SSS FULL

FILE 'HCAPLUS' ENTERED AT 12:43:43 ON 01 MAY 2007

=> s 17

L11 2 L7

=> s 110

L12 3797 L10

=> s 112 and p/dt

5703034 P/DT

L13 2222 L12 AND P/DT

=> s 113 and us/pc

```
1673584 US/PC
        708 L13 AND US/PC
L14
=> s 114 and py<=2002
     22885205 PY<=2002
          655 L14 AND PY<=2002
L15
=> s 115 and Cu
        823682 CU
          4965 CUS
        825879 CU
                (CU OR CUS)
L16
           57 L15 AND CU
=> s 115 and Cu-K
        823682 CU
         4965 CUS
        825879 CU
                (CU OR CUS)
       1406916 K
         5823 CU-K
                (CU(W)K)
L17
            0 L15 AND CU-K
=> s 115 and Bragg angle
         26421 BRAGG
            73 BRAGGS
         26472 BRAGG
                (BRAGG OR BRAGGS)
        325743 ANGLE
        108499 ANGLES
        398750 ANGLE
                 (ANGLE OR ANGLES)
          1742 BRAGG ANGLE
                (BRAGG(W)ANGLE)
           0 L15 AND BRAGG ANGLE
L18
=> d his
     (FILE 'HOME' ENTERED AT 12:38:46 ON 01 MAY 2007)
     FILE 'REGISTRY' ENTERED AT 12:38:58 ON 01 MAY 2007
L1
               STRUCTURE UPLOADED
T.2
              0 S L1
              1 S L1 SSS FULL
L3
     FILE 'HCAPLUS' ENTERED AT 12:39:30 ON 01 MAY 2007
             2 S L3
L4
     FILE 'REGISTRY' ENTERED AT 12:42:00 ON 01 MAY 2007
L5
                STRUCTURE UPLOADED
              0 S L5
L6
L7
              1 S L5 SSS FULL
L8
               STRUCTURE UPLOADED
             50 S L8
L9
L10
         6142 S L8 SSS FULL
```

FILE 'HCAPLUS' ENTERED AT 12:43:43 ON 01 MAY 2007

L11 2 S L7 L12 3797 S L10

L13 2222 S L12 AND P/DT L14 708 S L13 AND US/PC

L15 655 S L14 AND PY<=2002

L16 57 S L15 AND CU L17 0 S L15 AND CU-K

L18 0 S L15 AND BRAGG ANGLE

=> d lll ibib abs hitstr tot

L11 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:788224 HCAPLUS

DOCUMENT NUMBER: 145:212717

TITLE: Benzimidazolone compounds with plural color hue

INVENTOR(S): Hosaka, Masayoshi; Nagata, Yoshiaki PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE	
JP 2006206761	A	20060810	JP 2005-21322	20050128	
PRIORITY APPLN. INFO.:			JP 2005-21322	20050128	
GI					

AB The invention relates to benzimidazolone compds. of I with Cu-K\alpha characteristic X-ray diffraction peaks with Bragg angle 2θ 14.9±0.2, 18.9±0.2, 20.6±0.2, and 24.6±0.2°. Thus, a nonaq. dispersion coating comprising a reddish purple pigment of β -typed crystal I, an alkyd resin (Beckosol J 524-IM 60), and melamine resin (Super Beckamine G 821-60) showed high gloss.

IT 854738-84-4P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM

Ι

(Technical or engineered material use); PREP (Preparation); USES (Uses) (benzimidazolone reddish purple pigments with plural color hue for glossy coatings)

RN 854738-84-4 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]- (9CI) (CA INDEX NAME)

L11 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:547668 HCAPLUS

DOCUMENT NUMBER: 143:61474

TITLE: Benzimidazolone compound violet pigment

INVENTOR(S):
Hosaka, Masaki

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE			
WO	2005	0566	 88		A1		2005	 0623	,	WO 2	004-	 JP18	 190		2	0041	207
	W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	NO,
		NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
		MR,	ΝE,	SN,	TD,	ΤG											
_	2005 3680	-			A B2		2005 2005		,	JP 2	004-	3526	05		2	0041	206

EP 1693421 Α1 20060823 EP 2004-820196 20041207 R: CH, DE, FR, GB, LI 20061213 CN 1878838 CN 2004-80033010 20041207 Α PRIORITY APPLN. INFO.: JP 2003-410204 A 20031209 WO 2004-JP18190 W 20041207

OTHER SOURCE(S): MARPAT 143:61474

AB Compound I (R1-R4 = H, C1-5 alkyl or C1-5 alkoxy) with good thermal stability is prepared and used as a violet pigment for coatings. Thus, an alkyd resin coating containing I (R1-R4 = H; decomposition temperature 504°) showed good storage stability, solvent resistance, and color hue.

Ι

IT 854738-84-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(benzimidazolone compound violet pigment with good thermal stability and color hue for coatings)

RN 854738-84-4 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

\Rightarrow d 116 ibib abs hitstr 1-10

L16 ANSWER 1 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:499721 HCAPLUS

DOCUMENT NUMBER: 135:93918

TITLE: Novel anthraquinone pigments, their manufacture,

coloration of synthetic materials by kneading with the

pigments, and the colored synthetic materials

INVENTOR(S): Adan, Jan Marie

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding, Inc., Switz.

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001187844 EP 1127922	A A A1	20010710 20010829	JP 2000-391886 EP 2000-811214	20001225 < 20001220 <
R: AT, BE	C, CH, DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI	L, LT, LV,	FI, RO		
US 2001020432	A1	20010913	US 2000-749014	20001227 <
US 6485559	В2	20021126		
IN 2000MA0113() A	20070420	IN 2000-MA1130	20001227
CN 1309151	A	20010822	CN 2000-137542	20001228 <
PRIORITY APPLN. IN	'O.:		EP 1999-811217	A 19991229
OTHER SOURCE(S):	MARP	AT 135:93918	3	
GI				

AB The color pigments I [R1 = C1-6 alkyl, C1-6 alkoxy, phenoxy, halo; R2 = H, C1-6 alkyl, C1-6 alkoxy, phenoxy, halo, acylamino, CH2NH-acyl, phthalimidomethyl; R3 = C1-6 alkyl, C1-6 alkoxy, phenoxy, halo; Ring A may be substituted with SO3-M+ (M+ = cation); Rings B and C may be substituted with halo, OH, SH, amino, C1-6 alkylamino, C1-6 alkyl, C1-6 alkoxy,

RM

phenoxy, acylamino, C1-6 thioalkyl, or thiophenyl; Ring B may be substituted with Q at 5- or 8-positions] are manufactured by reaction of 1-chloro-, 1-nitro-, or 1-sulfoanthraquinone with 1 equiv of 2,4,6-trialkylanilines or reaction of 1,5- or 1,8-dichloro-, 1,5- or 1,8-dinitro-, or 1,5- or 1,8-disulfoanthraquinone with 2 equiv of 2,4,6-trialkylanilines in the presence of alkali acetate, Cu, and/or Cu salts and optionally organic solvents. Thus, condensation of 1-chloroanthraquinone with mesidine in the presence of Ca(OAc)2, Cu, and CuCl gave a coloring agent, which was kneaded with polyamide 6 granules to give colored granules showing good light fastness.

IT 37780-72-6P 348574-64-1P 348574-65-2P 348574-66-3P 348574-67-4P 348574-74-3P 348574-88-9P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)

(manufacture of anthraquinone pigments for coloration of synthetic resins) 37780-72-6 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2,6-dimethylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 348574-64-1 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2-ethyl-6-methylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 348574-65-2 HCAPLUS
CN 9,10-Anthracenedione, 1,5-bis[(2,6-dimethyl-4-phenoxyphenyl)amino]- (9CI)
(CA INDEX NAME)

RN 348574-66-3 HCAPLUS CN 9,10-Anthracenedione, 1,5-bis[(2,4,6-triethylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 348574-67-4 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2,6-dibromo-4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 348574-74-3 HCAPLUS

CN Acetamide, N,N'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)bis[imino(2,4,6-trimethyl-3,1-phenylene)methylene]]bis[2-chloro-(9CI) (CA INDEX NAME)

RN 348574-88-9 HCAPLUS

CN Benzenesulfonic acid, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)diimino]bis[2,4,6-trimethyl-, compd. with 1,6-hexanediamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 348574-87-8

CMF C32 H30 N2 O8 S2

CM 2

CRN 124-09-4 CMF C6 H16 N2

 ${\rm H_2N^-}$ (CH₂)₆ $-{\rm NH_2}$

IT 75333-01-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(manufacture of anthraquinone pigments for coloration of synthetic resins)

RN 75333-01-6 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2,4,6-trimethylphenyl)amino]- (9CI) (CA INDEX NAME)

10578677

L16 ANSWER 2 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:648178 HCAPLUS

DOCUMENT NUMBER: 123:85966

TITLE: Process and catalysts for the preparation of

anthraquinonamine vat dye precursors and dyes

INVENTOR(S): Bergmann, Udo; Hoch, Helmut; Kilburg, Heike;

Kohlhaupt, Reinhold; Niedenbrueck, Matthias

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 649833 EP 649833	A1 B1	19950426 19960228	EP 1994-116049	19941012 <
R: CH, DE, FR, JP 07157673 US 5525743 PRIORITY APPLN. INFO.:	GB, IT A A	, LI 19950620 19960611	JP 1994-251044 US 1994-328948 DE 1993-4335975 A	19941017 < 19941021 < 19931021
OTHER SOURCE(S): GI	MARPAT	123:85966		

The title compds. [I; R = Ph, (un)substituted anthraquinonyl,AΒ (un) substituted benzanthronyl, (un) substituted pyranthronyl, etc.; X = halogen, hydroxy, (un) substituted amino, (un) substituted benzoylamino, etc.; m = 0-4; n = 1-4], useful as either anthraquinoidal vat dye precursors or dyes (no data), are prepared by the condensation of an amino group-containing anthraquinone compound with a haloarom. compound in the presence

ΙI

of a Cu catalyst and acid-binding compound in an alkyl benzoate solvent. Thus, 3-bromobenzanthrone was condensed with 1-aminoanthraquinone in the presence of PhCO2Me, Cu powder, and anhydrous Na2CO3 at 200°, producing anthraquinonamine, II, a precursor of C. I. Vat Green 3 (no data).

ΙT 117-03-3P 14608-27-6P 94349-29-8P

164348-47-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (process and catalysts for the preparation of anthraquinonamine vat dye precursors and dyes)

RN 117-03-3 HCAPLUS

9,10-Anthracenedione, 1,5-bis[(9,10-dihydro-9,10-dioxo-1-CN anthracenyl)amino] - (CA INDEX NAME)

RN 14608-27-6 HCAPLUS

CN 9,10-Anthracenedione, 1-amino-5-[(7-oxo-7H-benz[de]anthracen-3-yl)amino]-(9CI) (CA INDEX NAME)

RN 94349-29-8 HCAPLUS

CN Benzamide, N-[9,10-dihydro-9,10-dioxo-5-[(5,8,13,14-tetrahydro-5,8,14-trioxonaphth[2,3-c]acridin-10-yl)amino]-1-anthracenyl]- (9CI) (CA INDEX NAME)

RN 164348-47-4 HCAPLUS

CN Benzamide, N,N'-[(1-chloro-5,8,13,14-tetrahydro-5,8,13-trioxonaphth[2,3-c]acridine-3,7-diyl)bis[imino(9,10-dihydro-9,10-dioxo-5,1-anthracenediyl)]]bis- (9CI) (CA INDEX NAME)

IT 117-06-6, 1-Amino-5-benzoylaminoanthraquinone 129-44-2,

1,5-Diaminoanthraquinone

RL: RCT (Reactant); RACT (Reactant or reagent)

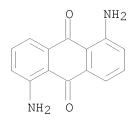
(process and catalysts for the preparation of anthraquinonamine vat dye precursors and dyes from) $\$

RN 117-06-6 HCAPLUS

CN Benzamide, N-(5-amino-9,10-dihydro-9,10-dioxo-1-anthracenyl)- (CA INDEX NAME)

RN 129-44-2 HCAPLUS

CN 9,10-Anthracenedione, 1,5-diamino- (CA INDEX NAME)



L16 ANSWER 3 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:508266 HCAPLUS

DOCUMENT NUMBER: 121:108266

TITLE: Process for the preparation of anthraquinones

INVENTOR(S): Ebel, Klaus; Schroeder, Juergen

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Eur. Pat. Appl., 10 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 597287 EP 597287	A1 B1	19940518 19960410	EP 1993-116939	19931020 <
R: BE, DE, FR, DE 4238045 US 5387704 PRIORITY APPLN. INFO.:		19940519 19950207	DE 1992-4238045 US 1993-150363 DE 1992-4238045	19921111 < 19931109 < 19921111
OTHER SOURCE(S): GI	MARPAT	121:108266	22 2332 2230010 11	1001111

10578677

AB The title compds. [I; A = (R3)C:C(R4)C(R5):C(R6), CH:CHCH:CNHCO2R2; R1 = H, :O; R2 = C1-8 alkyl, C7-20 alkyl; R3-R6 = H, C1-8 alkyl, C7-20 phenylalkyl, C1-8 alkoxy, NO2, CN, halogen etc.], useful as dye intermediates (no data), are prepared by the reaction of N-butadienylcarbamide acid esters H2C:CHCH:CNHCO2R2 with 1,4-naphthoquinones or 1,4-benzoquinones, resp., at 0-150° and the intermediate reacted in a tert-amine with O-containing gases in the presence of Cu salts. The obtained carbamoylanthraquinones may optionally be hydrolyzed with hydroxide solns. at 0-150°.

IT 156765-00-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (high-yield preparation of)

RN 156765-00-3 HCAPLUS

Ι

CN Carbamic acid, (9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)bis-, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)

L16 ANSWER 4 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:410853 HCAPLUS

DOCUMENT NUMBER: 115:10853

TITLE: Anthraquinone dyes having alkylsulfonylamino

substituents

INVENTOR(S): Smith, Terrance P.; Zaklika, Krzysztof A. PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 409638	A1	19910123	EP 1990-307940	19900720 <
EP 409638	B1	19940831		
R: DE, FR, GB,	ΙΤ			
US 5034547	A	19910723	US 1989-384157	19890721 <
CA 2019545	A1	19910121	CA 1990-2019545	19900621 <
JP 03059076	A	19910314	JP 1990-192836	19900720 <
PRIORITY APPLN. INFO.:			US 1989-384157 A	19890721
OTHER SOURCE(S):	MARPAT	115:10853		

GI For diagram(s), see printed CA Issue.

AB Solvent-soluble dyes I [R1 = C≥2 (un)substituted alkyl without α halogen; R2-R4 = any group other than auxochromic groups] have lower m.p. and excellent lightfastness, and are useful in thermal-transfer printing. Thus, 1-chloroanthraquinone was heated with 1-octanesulfonamide in the presence of Cu acetate and K2CO3 in o-dichlorobenzene at reflux for 2.5 h, producing yellow 1-(octylsulfonylamino)anthraquinone.

IT 133119-48-9P 133119-50-3P 134318-88-0P

RL: PREP (Preparation)

(manufacture of, as solvent-soluble dye)

RN 133119-48-9 HCAPLUS

CN 1-Octanesulfonamide, N,N'-(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)bis-(9CI) (CA INDEX NAME)

RN 133119-50-3 HCAPLUS

CN 1-Octanesulfonamide, N,N',N''-(9,10-dihydro-9,10-dioxo-1,4,5-anthracenetriyl)tris- (9CI) (CA INDEX NAME)

RN 134318-88-0 HCAPLUS

CN 1-Octanesulfonamide, N,N',N'',N'''-(9,10-dihydro-9,10-dioxo-1,4,5,8-anthracenetetrayl)tetrakis- (9CI) (CA INDEX NAME)

IT 79285-23-7

RL: PRP (Properties)

(solubility of, in Bu acetate)

RN 79285-23-7 HCAPLUS

CN Benzenesulfonamide, N,N'-(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)bis[4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



L16 ANSWER 5 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:8710 HCAPLUS

DOCUMENT NUMBER: 112:8710

TITLE: Halogenated anthraquinones useful as near

infrared-absorbing dyes and their preparation

INVENTOR(S): Ohyamata, Tsukasa; Takuma, Keisuke; Kuroda, Shizuo;

Aiga, Hiroshi

PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan

SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	EP 323184	A1	19890705	EP 1988-312285	19881223 <
	EP 323184	В1	19940309		
	R: CH, DE, FR,	GB, LI	, NL		
	JP 01172458	A	19890707	JP 1987-330163	19871228 <
	JP 08013930	В	19960214		
	CA 1321790	С	19930831	CA 1988-586468	19881220 <
	US 5342974	A	19940830	US 1988-291028	19881228 <
	PRIORITY APPLN. INFO.:			JP 1987-330163 A	19871228
-	OTHER SOURCE(S):	MARPAT	112:8710		
	GT				

AB The title dyes I (R1-R4 = H, halogen, lower alkyl, cycloalkyl, lower alkoxy, CF3, PhO, OH; such that ≥1 of R1-R4 is halogen), which have very high near-IR absorption and are thus useful as organic filters for semiconductor laser-containing measuring apparatus, are prepared by reacting

Ι

1,4,5,8-tetrachloroanthraquinone (II) with a \geq 4-fold molar excess of an appropriately substituted PhNH2 in the presence of a catalytically effective amount of Cu ions, a salt of an aliphatic carboxylic acid (e.g., KOAc), and PhCH2OH or its derivs. at elevated temps. In this manner, II 10.87, p-toluidine 27.2, 4-ClC6H4NH2 31.3, KOAc 13.4, CuSO4 1.24, and PhCH2OH 3.41 parts were heated to 130° under N for 6.5 h, forming 1-(4-chloroanilino)-4,5,8-tris(4-methylanilino)anthraquinone, which had 99% transmittance (CHCl3) at 860 nm. 109059-57-6P 121208-10-4P, 1-(4-Chloroanilino)-4,5,8tris(4-methylanilino)anthraquinone 124252-44-4P, 1-(4-Chloroanilino)-4,5,8-tris(4-butylanilino)anthraquinone 124252-45-5P, 1,4-Bis(4-chloroanilino)-5,8-bis(4methylanilino)anthraquinone 124252-46-6P 124252-47-7P 124252-48-8P 124252-49-9P 124252-50-2P 124252-51-3P 124252-52-4P 124252-53-5P 124252-54-6P RL: PREP (Preparation) (manufacture of, as near IR-absorbing dye) RN 109059-57-6 HCAPLUS CN 9,10-Anthracenedione, 1,4,5,8-tetrakis[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)

RN 121208-10-4 HCAPLUS
CN 9,10-Anthracenedione, 1-[(4-chlorophenyl)amino]-4,5,8-tris[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 124252-44-4 HCAPLUS

CN 9,10-Anthracenedione, 1,4,5-tris[(4-butylphenyl)amino]-8-[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)

RN 124252-45-5 HCAPLUS

CN 9,10-Anthracenedione, 1,4-bis[(4-chlorophenyl)amino]-5,8-bis[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 124252-46-6 HCAPLUS
CN 9,10-Anthracenedione, 1-[(4-chlorophenyl)amino]-4,5,8-tris(phenylamino)(9CI) (CA INDEX NAME)

RN 124252-47-7 HCAPLUS
CN 9,10-Anthracenedione, 1-[(4-chlorophenyl)amino]-4,5,8-tris[(4-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)

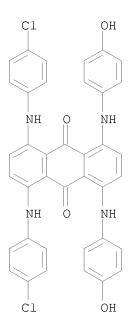
RN 124252-48-8 HCAPLUS

CN 9,10-Anthracenedione, 1-[(4-chlorophenyl)amino]-4,5,8-tris[(4-cyclohexylphenyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 124252-49-9 HCAPLUS
CN 9,10-Anthracenedione, 1,4-bis[(4-chlorophenyl)amino]-5,8-bis[(4-hydroxyphenyl)amino]- (9CI) (CA INDEX NAME)



RN 124252-50-2 HCAPLUS
CN 9,10-Anthracenedione, 1-[(4-chlorophenyl)amino]-5-[(4-cyclohexylphenyl)amino]-4,8-bis[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 124252-51-3 HCAPLUS
CN 9,10-Anthracenedione, 1-[(4-fluorophenyl)amino]-4,5,8-tris[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 124252-52-4 HCAPLUS

CN 9,10-Anthracenedione, 1-[(3-bromophenyl)amino]-4,5,8-tris[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

RN 124252-53-5 HCAPLUS

CN 9,10-Anthracenedione, 1-[(3-fluorophenyl)amino]-4,5,8-tris[(4-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)

RN 124252-54-6 HCAPLUS
CN 9,10-Anthracenedione, 1-[(4-bromophenyl)amino]-4,5-bis[(4-cyclohexylphenyl)amino]-8-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

Br Me

L16 ANSWER 6 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:222289 HCAPLUS

DOCUMENT NUMBER: 108:222289

TITLE: Polyamic acids or esters and polyimides from

> 9,10-dihydroanthracenediamines Pfeifer, Josef; Duthaler, Rudolf

Ciba-Geigy A.-G., Switz. PATENT ASSIGNEE(S): Eur. Pat. Appl., 20 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
	EP 253765	A1	19880120	EP 1987-810357	19870624	<	
	EP 253765	В1	19900418				
	R: BE, CH, DE,	ES, FR	, GB, IT, LI	, NL, SE			
	US 4847359	A	19890711	US 1987-63881	19870619	<	
	CA 1281481	С	19910312	CA 1987-540662	19870626	<	
	BR 8703288	A	19880315	BR 1987-3288	19870629	<	
	JP 63039925			JP 1987-161390		<	
PRIO	RITY APPLN. INFO.:			CH 1986-2618 A			
AB		wit.h a	ood resistar	nce to heat and thermal			
				acid derivs. and diami			
	-		_				
	≥5 mol% 9,10-dihydroanthracenediamines, optionally bearing 1-4 alkyl, cycloalkyl, aralkyl, aryl, or halogen groups. Stirring 0.84 g						
	9,10-dihydro-1,5-anthracenediamine [prepared (20.5 g) by reduction of 100 g						
	1,5-diaminoanthraquinone with Zn-NaOH and catalytic hydrogenation of the						
	intermediate], 0.73 g 2,4-toluenediamine, and 3.22 g 3,3;4,4'-						
	benzophenonetetracarboxylic dianhydride in 39 mL N-methylpyrrolidone for 5						
	h and cyclizing with Ac20-Et3N gave a polyimide with inherent viscosity						
	0.72 dL/g, glass temperature 334°, and weight loss in 1 h at 400°						
	1.9%. A 1-2 μ film on Cu was exposed through a Stouffer wedge mask to a 1-kW UV lamp for 30 s, developed, and etched with FeCl3,						
					with rect.) ,	
T. III	giving an image wit	n Stouf	rer sensitiv	TITY J.			
ΙΤ	114540-02-2P	,					

RL: PREP (Preparation)

(heat-resistant and photosensitive, manufacture of)

114540-02-2 HCAPLUS RN

1H-Thiopyrano[2,3-f:5,6-f']diisobenzofuran-1,3,7,9,11-pentone, polymer CN with 1,5-diamino-9,10-anthracenedione and 4-methyl-1,3-benzenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 107688-72-2 CMF C17 H4 O7 S

CM 2

CRN 129-44-2 CMF C14 H10 N2 O2

CM 3

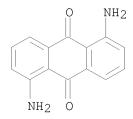
CRN 95-80-7 CMF C7 H10 N2

IT 129-44-2P

RL: PREP (Preparation) (preparation of)

RN 129-44-2 HCAPLUS

CN 9,10-Anthracenedione, 1,5-diamino- (CA INDEX NAME)



L16 ANSWER 7 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:628508 HCAPLUS

DOCUMENT NUMBER: 105:228508

TITLE: Anthraquinone imide compounds

INVENTOR(S):
Blattner, Rudolf

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

KIND DATE

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

						_	
	EP 199670	A2	19861029	EP	1986-810141		19860325 <
	EP 199670	A3	19870204				
	EP 199670	B1	19890614				
	R: CH, DE, FR,	GB, LI					
	US 4701281	A	19871020	US	1986-844408		19860326 <
	JP 61258866	A	19861117	JP	1986-72638		19860401 <
	JP 03054992	В	19910821				
PRIC	RITY APPLN. INFO.:			СН	1985-1400	Α	19850401
AB	Anthraquinone imide	dyes a	re prepared	by	condensation of a	n a	nthraquinone
	compound containing	≥1 pri	mary amino 🤉	grou	p with an aromati	c h	alogen compound
	in an organic solvent, in presence of base and a Cu catalyst, by						
	quickly heating to $140-250^{\circ}$. The compds. are useful dyes for						
	cotton. Thus, 1-ch	loroant	hraquinone 1	122,	1,4-diaminoanthr	aqu	inone 60,
Na2CO3 50, and CuCl 1.5 g were mixed in 500 mL PhNO2 at room temperature							
During							
	1.5 h this suspension was added to a boiling suspension of 10 g Na2CO3,						
	0 5 0 01 1 50	10	0 1040 0450			_	3

1.5 h this suspension was added to a boiling suspension of 10 g Na2CO3, 0.5 g CuCl, and 50 mL PhNO2 (210-215°). After an addnl. 2.5 h at this temperature the reaction mixture was worked up to give 170 g trianthrimide.

IT 117-06-6 129-44-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with aromatic halides)

RN 117-06-6 HCAPLUS

CN Benzamide, N-(5-amino-9,10-dihydro-9,10-dioxo-1-anthracenyl)- (CA INDEX

APPLICATION NO.

DATE

NAME)

RN 129-44-2 HCAPLUS

CN 9,10-Anthracenedione, 1,5-diamino- (CA INDEX NAME)

L16 ANSWER 8 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:35464 HCAPLUS

DOCUMENT NUMBER: 104:35464

TITLE: Anthraquinone imide compounds

INVENTOR(S):
Dill, Bernd

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
EP 136981	A2	19850410	EP 1984-810478		19841001 <
EP 136981	A3	19860319			
EP 136981	В1	19890405			
R: CH, DE, FR,	GB, LI				
СН 657357	A5	19860829	CH 1983-5432		19831006 <
US 4659831	A	19870421	US 1984-657104		19841002 <
JP 60096656	A	19850530	JP 1984-208403		19841005 <
JP 04081628	В	19921224			
PRIORITY APPLN. INFO.:			CH 1983-5432	Α	19831006
			SE 1983-5432	Α	19831006
OTHER SOURCE(S):	CASREA	CT 104:35464	; MARPAT 104:35464		

AB Vat dye intermediates are prepared by reaction of aminoanthraquinones with

aromatic halides in an organic solvent at elevated temperature in the presence of a

base and a Cu catalyst to 60-95% conversion, followed by raising the temperature by 5-60° to increase the yield and quality of the product. Thus, 600 parts 3,8-dibromobenzanthrone was mixed with 705 parts 1-aminoanthraquinone in 5000 parts PhNO2 at 80°, treated with 250 parts Na2CO3 and 7 parts CuCl, heated to 190°, treated with 7 parts CuCl, and heated at 210° for 3 h. The mixture was then heated to 225° for 2 h to give the bis(anthraquinonylamino)benzanthrone in 100% yield (based on dibromobenzanthrone), which could be cyclized to an olive green vat dye for cotton by alkali fusion. In the absence of the treatment step at 225° the yield was reduced, the product was contaminated with 1:1 condensation product, and the resulting vat dye gave lighter coloration and showed poorer polyester reserve properties.

IT 117-06-6 129-44-2

RL: USES (Uses)

(condensation of, with aromatic halides, two-stage)

RN 117-06-6 HCAPLUS

CN Benzamide, N-(5-amino-9,10-dihydro-9,10-dioxo-1-anthracenyl)- (CA INDEX NAME)

RN 129-44-2 HCAPLUS

CN 9,10-Anthracenedione, 1,5-diamino- (CA INDEX NAME)

IT 117-03-3P

RL: PREP (Preparation)

(manufacture of, in two stages, as intermediate for vat dyes)

RN 117-03-3 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(9,10-dihydro-9,10-dioxo-1-anthracenyl)amino]- (CA INDEX NAME)

L16 ANSWER 9 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:482890 HCAPLUS

DOCUMENT NUMBER: 101:82890

TITLE: Dye-coated metal powders and plastic magnets

impregnated with a dye-coated metallic magnet powder

INVENTOR(S): Tsuchida, Michinori; Shimizu, Toshihide; Kaneko,

Ichiro; Abe, Tokuji

PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 111331 EP 111331	A2 A3	19840620 19860625	EP 1983-112415	19831209 <
EP 111331	В1	19880601		
R: CH, DE, FR, JP 59110783	GB, LI A	, NL 19840626	JP 1982-219600	19821214 <
JP 62029483	В	19870626		
JP 59179638 JP 63006587	A B	19841012 19880210	JP 1983-56333	19830331 <
US 4543382	A	19850924	US 1983-561552	19831214 <
PRIORITY APPLN. INFO.:				A 19821214 A 19830331

AB The coating of metallic powder using an organic dye, which is used to fabrication plastic magnets and is designed to prevent surface oxidation, is described. The magnetic alloy can be Co-based rare earth alloys, and the magnet is fabricated by using thermoplastic resin such as nylon or

polyphenylene sulfide resin. For example, a metallic powder containing Cu, electrolytic Fe and a Co-rare earth alloy is coated by a dye such as C.I. Solvent Black 7 in a MeOH-toluene solution The plastic magnet is fabricated using a thermoplastic resin such as polyphenylene sulfide resin.

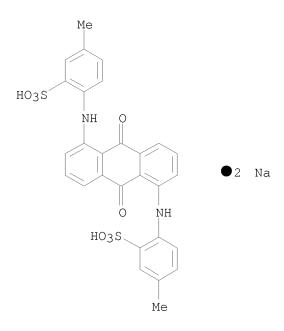
6408-63-5 ΙT

RL: PRP (Properties)

(cobalt-rare earth alloy magnetic powder coated with, for plastic magnets)

RN 6408-63-5 HCAPLUS

CN Benzenesulfonic acid, 2,2'-[(9,10-dihydro-9,10-dioxo-1,5anthracenediyl)diimino]bis[5-methyl-, sodium salt (1:2) (CA INDEX NAME)



L16 ANSWER 10 OF 57 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:595567 HCAPLUS

DOCUMENT NUMBER: 99:195567

TITLE: Polyesters containing copolymerized anthraquinone

colorants with sulfonamido groups

Davis, Thomas G.; Weaver, Max A.; Giles, Ralph R. INVENTOR(S):

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: U.S., 16 pp. CODEN: USXXAM

Patent

DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4403092	А	19830906	US 1982-443784	19821122 <
CA 1191298	A1	19850730	CA 1983-438388	19831005 <
WO 8402136	A2	19840607	WO 1983-US1834	19831121 <

WO 8402136 Α3 19840802 W: JP RW: BE, DE, FR, GB, NL EP 125311 Α1 19841121 EP 1984-900190 19831121 <--EP 125311 В1 19880120 R: BE, DE, FR, GB, NL Τ JP 60500335 19850314 JP 1984-500359 19831121 <--JP 06206990 Α 19940726 JP 1993-301946 19931201 <--JP 08003054 19960117 В PRIORITY APPLN. INFO.: US 1982-443784 A 19821122 WO 1983-US1834 W 19831121 AB Diol-containing anthraquinone dyes containing ≥1 sulfonamido groups are prepared and used to prepare lightfast colored polyesters. Thus, 1,5-dichloroanthraquinone [82-46-2] 55.4, o-anisidine [90-04-0] 205, KOAc 49.0, and Cu bronze 1 g were heated 3 h at 150-155° to give 81.6 g 1,5-di(o-anisidino)anthraquinone (I) [71417-40-8]. I (22.5 g) and 225 g ClSO3H were heated 1 h at $40-45^{\circ}$ to give 1,5-di(2-methoxy-5-chlorosulfonylanilino)anthraquinone [87855-09-2], 1/5 of which was mixed with 2.6 g 2-aminoethanol [141-43-5] to give a diol (II) [87855-14-9]. A colored polyester [87865-26-7] having inherent viscosity 0.58 (in PhOH/C2H2C14) was prepared by mixing 145.5 g di-Me terephthalate, 85.0 g ethylene glycol, 100.0 ppm Ti catalyst, and 100.0 ppm II, heating to 195° for 140 min, and then to 285° at 0.10 mm Hg for 25 min. 87855-10-5 87855-11-6 87855-12-7 ΙT 87855-13-8 87855-14-9 RL: USES (Uses) (dyes, copolymerizable, for polyesters) RN 87855-10-5 HCAPLUS Benzenesulfonamide, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-CN

anthracenediyl)diimino]bis[N-(3-hydroxyphenyl)-4-methoxy- (9CI) (CA INDEX

RN 87855-11-6 HCAPLUS

NAME)

CN Benzenesulfonamide, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)diimino]bis[N-(4-hydroxyphenyl)-4-methoxy- (9CI) (CA INDEX NAME)

RN 87855-12-7 HCAPLUS

CN Benzenesulfonamide, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)diimino]bis[N-[4-(2-hydroxyethyl)phenyl]-4-methoxy- (9CI) (CA INDEX NAME)

MeO
$$\sim$$
 CH₂-CH₂-OH \sim CH₂-CH₂-OH \sim CH₂-CH₂-OH

RN 87855-13-8 HCAPLUS

CN Benzoic acid, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-

anthracenediyl)bis[imino(4-methoxy-3,1-phenylene)sulfonylimino]]bis-,
dimethyl ester (9CI) (CA INDEX NAME)

RN 87855-14-9 HCAPLUS

CN Benzenesulfonamide, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)diimino]bis[N-(2-hydroxyethyl)-4-methoxy- (9CI) (CA INDEX NAME)

IT 71417-40-8P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorosulfonation of)

RN 71417-40-8 HCAPLUS

CN 9,10-Anthracenedione, 1,5-bis[(2-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)

IT 87855-09-2P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, with amino compds.)

RN 87855-09-2 HCAPLUS

CN Benzenesulfonyl chloride, 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)diimino]bis[4-methoxy- (9CI) (CA INDEX NAME)

IT 87865-26-7P

RL: PREP (Preparation)

(preparation of, colored, lightfast)

RN 87865-26-7 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with 3,3'-[(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)diimino]bis[N-(2-hydroxyethyl)-4-methoxybenzenesulfonamide] and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

CRN 87855-14-9

CMF C32 H32 N4 O10 S2

CM 2

CRN 120-61-6 CMF C10 H10 O4

CM 3

CRN 107-21-1 CMF C2 H6 O2

но-сн2-сн2-он

=> log y COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	76.24	614.14
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.36	-10.92

STN INTERNATIONAL LOGOFF AT 12:46:56 ON 01 MAY 2007